

## ABSTRACT OF THE DISCLOSURE

Feature quantities such as an area, a circumferential length, end points, the center of gravity, and a moment are extracted for each image area. When one of the pixel immediately preceding the detected pixel on the same line and the pixel that is on the immediately preceding line and right above the detected pixel belongs to a prescribed image area after a pixel having a prescribed density is detected in scanning one line, the area number of the image area is inherited. The processing is performed sequentially on the succeeding pixels to store resulting image data are stored in a line buffer.